DEFENSE INFRASTRUCTURE

Most Recruit Training Barracks Have Significant Deficiencies
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June 13, 2002

Congressional Committees

Over the last decade the Department of Defense (DOD) reports that it has been faced with the major challenge of adequately maintaining its facilities to meet its mission requirements. Over time, facilities have been aging and deteriorating as funds needed to sustain and recapitalize the facilities have fallen short of reported requirements. In response to a requirement in the conference report accompanying the Defense Appropriations Act for Fiscal Year 2002, we reviewed the physical condition of barracks used to house military recruits attending basic training during their first 6 to 12 weeks of military service. Our overall objectives were to determine (1) the physical condition of the services' training barracks for recruits and (2) whether the services have plans to recapitalize these facilities. In performing our work, we visited all ten locations where the military services conduct basic training—five in the Army, three in the Marine Corps, and one each in the Navy and the Air Force (see app. I).

This is one of several reviews we currently have underway examining various aspects of facility conditions in DOD. We are also reviewing the physical condition and recapitalization plans for all active force facilities in DOD's inventory. And, we recently initiated a similar review for the reserve components' facilities.

Results in Brief

Our review of the services' condition assessments in conjunction with visits to the basic training locations showed that, to varying degrees, most barracks were in need of significant repair, although some barracks were in better condition than others. We found that the exteriors of each service's barracks were generally in good condition and presented an acceptable appearance, but the barracks' infrastructure often had repair problems that had persisted over time primarily because of inadequate maintenance. In general, we found that the physical condition of the Air Force's and Marine Corps' San Diego barracks were among the best we observed, while the Army's and Navy's barracks in general and the Marine Corps' barracks at

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1The term "sustain" refers to efforts required to keep a facility at its current physical condition using operation and maintenance funds. “Recapitalize” refers to efforts to improve condition or replace a facility with new construction, using either operation and maintenance or military construction funds.
Parris Island, South Carolina, were among the worst. The Army, with the greatest number of barracks, had the most problems. The most prevalent problems across the services included a lack of or inadequate heating and air conditioning, inadequate ventilation (particularly in bathing areas), and plumbing-related (e.g., leaks and clogged drains) deficiencies. Base officials told us that, although these deficiencies had an adverse impact on the quality of life for recruits and were a burden on trainers, they were able to accomplish their overall training mission.

The services’ approaches to recapitalize their recruit barracks vary and are influenced by their overall priorities to improve all facilities. While the Navy, Air Force, and Marine Corps are addressing many of their recapitalization needs in the near-term, most of the Army’s plans are longer-term. The Navy has the most ambitious recruit barracks recapitalization approach in the near-term. The Navy has recently constructed 1 new barracks and intends to construct an additional 15 new replacement barracks by 2009 at an estimated cost of about $570 million. The Army’s recruit barracks recapitalization efforts are longer-term because of competing higher near-term priorities, such as renovating or replacing bachelor living quarters for its enlisted personnel. While it expects to spend over $1.7 billion in renovating and constructing new barracks over the next 20 years, most of the work is not expected to be funded until after 2008. The Marine Corps has a more limited recruit barracks recapitalization program with most of its efforts focused on renovating, rather than replacing, its existing barracks in the near-term. The Air Force has no near-term plans to construct new recruit barracks, opting instead to continue ongoing renovations of its barracks.

We are continuing to examine facility conditions, assessments, and recapitalization plans as part of our broader ongoing work on the physical condition and maintenance of all Department facilities. Accordingly, we are not making any recommendations at this time pending completion of that broader body of work. In commenting on a draft of this report, the Department concurred with our findings.
Background

Basic training is the initial training provided to military recruits upon entering service into one of the military services. While the program and length of instruction varies somewhat among the services, the intent of the training is to transform male and female recruits from civilians into military service members. Basic training typically consists of physical conditioning; learning the military service’s core values, history and tradition; weapons qualification; instilling discipline; and nuclear, biological, and chemical protection training along with other training needed for initial entry into the services. The training varies in length—typically 6.4 weeks in the Air Force, 9 weeks in the Army and Navy, and 12 weeks in the Marine Corps. Following completion of basic training, recruits attend advanced individual training to further enhance skills in particular areas of interest (military occupational specialties).²

Upon arriving at a basic training location, recruits are processed and are generally housed for several days in reception barracks pending their assignment to a training unit and their primary barracks for the duration of the basic training period. For the most part, the housing accommodations within existing barracks are typically the same, regardless of male or female occupancy. DOD standards dictate space requirements of 72 square feet of living space per recruit, but the actual space provided is often less than that for the services, particularly during the summer months when a surge of incoming recruits usually occurs. In the Navy and Air Force, male and female recruits are housed on different floors in the buildings. In the Army, Fort Jackson and Fort Leonard Wood are the only locations where both male and female recruits undergo basic training, and they are housed separately in the same buildings, sometimes on the same floor. In the Marine Corps, all female recruits receive basic training at Parris Island, and they are housed in separate barracks.

²For the purposes of this report, we have included in basic training the Army’s One Station Unit Training, which combines basic training and advanced individual training into one continuous course.
While the barracks across the services differ in design, capacity, and age, it is common for the barracks to have 2 or 3 floors with central bathing areas and several “open bays” housing from 50 to 88 recruits each in bunk beds. Some of the barracks, such as the Army’s “starships” and the Air Force barracks, are large facilities that house over 1,000 recruits. Others, especially those constructed in the 1950s and early 1960s, are smaller with recruit capacities of about 240 or less. Table 1 provides an overall summary of the number and age of the military services’ recruit barracks, along with the number of recruits trained in fiscal year 2001. As shown in the table, the Army has the largest number of barracks—over 60 percent of the total across the services—and trains nearly one-half of the recruits entering the military.

Table 1: Recruit Barracks—Number, Average Age, and Training Load

<table>
<thead>
<tr>
<th>Service</th>
<th>Location</th>
<th>Number of barracks</th>
<th>Average age of barracks (in years)</th>
<th>Number of recruits trained in FY 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Fort Benning, Ga.</td>
<td>1</td>
<td>20</td>
<td>28,134</td>
</tr>
<tr>
<td></td>
<td>Fort Jackson, S.C.</td>
<td>5</td>
<td>30</td>
<td>34,667</td>
</tr>
<tr>
<td></td>
<td>Fort Knox, Ky.</td>
<td>4</td>
<td>43</td>
<td>12,085</td>
</tr>
<tr>
<td></td>
<td>Fort Leonard Wood, Mo.</td>
<td>3</td>
<td>36</td>
<td>21,497</td>
</tr>
<tr>
<td>Navy</td>
<td>Great Lakes, Ill.</td>
<td>1</td>
<td>38</td>
<td>51,160</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>Parris Island, S.C.</td>
<td>1</td>
<td>34</td>
<td>20,129</td>
</tr>
<tr>
<td></td>
<td>San Diego, Calif.</td>
<td>1</td>
<td>29</td>
<td>18,729</td>
</tr>
<tr>
<td></td>
<td>Camp Pendleton, Calif.</td>
<td>0</td>
<td>39</td>
<td>Included in San Diego numbers</td>
</tr>
<tr>
<td>Air Force</td>
<td>Lackland Air Force Base, Tex.</td>
<td>1</td>
<td>32</td>
<td>40,642</td>
</tr>
</tbody>
</table>

Source: DOD data.

aReception barracks normally house incoming recruits undergoing in-processing for up to several days, while primary barracks are used to house recruits during basic training.

bAbout 4 weeks (consisting of weapons qualification and field training exercises) of the Marine Corps 12-week basic training course at San Diego is conducted at Camp Pendleton because of training space limitations at its San Diego location.

cThe Air Force’s use of bunk beds usually only occurs during the summer surge period.

dThe Army’s “starships” barracks normally have 3 stories and five separate wings. The first floor is used for operations and training, and the second and third floors are used for housing up to 1,100 recruits.
The Army also uses temporary barracks, referred to as “relocatables,” to accommodate recruits at locations where capacity is an issue. Figure 1 depicts an exterior view of recruit barracks at Lackland Air Force Base, Texas, an “open bay” living space at the Marine Corps Recruit Depot at Parris Island, South Carolina, and an Army temporary (relocatable) barracks at Fort Sill, Oklahoma.

Figure 1: Views of Recruit Barracks

Source: Air Force and GAO photographs.

Until recently, DOD had no readiness reporting system in place for its defense installations and facilities. In fiscal year 2000, DOD reported to the Congress for the first time on installation readiness as an integral element of its overall Defense Readiness Reporting System. At the core of the system is a rating classification, typically referred to as a “C” rating. The C-
rating process is intended to provide an overall assessment that considers condition and capacity for each of nine facility classes (e.g., “operations and training,” and “community and housing”) on a military installation. Recruit training barracks fall within the community-and-housing facility class. The definitions for the C-ratings are as follows:

- C-1—only minor facility deficiencies with negligible impact on capability to perform missions;
- C-2—some deficiencies with limited impact on capability to perform missions;
- C-3—significant facility deficiencies that prevent performing some missions; and
- C-4—major facility deficiencies that preclude satisfactory mission accomplishment.

Each service has the latitude to develop its own processes in establishing C-ratings for its facilities. The services’ systems for assessing the condition of facilities are: the Army’s Installation Status Report; the Air Force’s Installations’ Readiness Report; the Navy’s Installation Readiness Reporting System; and the Marine Corps’ Commanding Officer’s Readiness Reporting System. These systems generally provide aggregate assessments of the physical condition of facilities based on periodic facility inspections. The Department subsequently aggregates the services’ reports and submits an overall assessment for each facility class to the Congress in the Department’s Quarterly Readiness Report.

Most Recruit Training Barracks Have Significant or Major Deficiencies

The majority of the services’ basic training installations had given their recruit barracks a C-3 rating, indicating they have significant deficiencies. Despite the acceptable outward appearance and generally good condition of most barracks’ exteriors, our visits to the training locations confirmed that most barracks had significant (C-3) or major (C-4) deficiencies requiring repair or facility replacement. Our site visits confirmed the existence of significant deficiencies, but we also noted some apparent inconsistencies in service ratings of their facilities’ condition. Conditions varied by location. Among barracks in poor conditions, we observed a number of typical heating and air conditioning, ventilation, and plumbing-related deficiencies that formed the basis of the services’ ratings for their barracks. Base officials told us that, although these deficiencies had an
adverse impact on the quality of life for recruits and were a burden on trainers, they were able to accomplish their overall training mission. At the same time, we noted recent improvements had been made to some recruit barracks at various locations.

**Condition of Barracks Varies by Location**

We observed that, overall, the services' recruit training barracks had significant or major deficiencies, but that conditions of individual barracks vary by location. In general, we observed that the Army's, Navy's, and Marine Corps' Parris Island barracks were in the worst physical condition. Table 2 shows the services' overall rating assessments for the recruit barracks by specific location and the typical deficiencies in those barracks that form the basis of the ratings.

<table>
<thead>
<tr>
<th>Military Service</th>
<th>Location</th>
<th>Barracks C-rating&lt;sup&gt;a&lt;/sup&gt; FY 2001</th>
<th>Typical deficiencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Fort Benning, Ga.</td>
<td>C3</td>
<td>Inadequate heating and air conditioning; sewer drainage problems; inadequate ventilation; roof leaks</td>
</tr>
<tr>
<td></td>
<td>Fort Jackson, S.C.</td>
<td>C3</td>
<td>Inadequate air conditioning; hot water problems; inadequate ventilation; no sprinkler systems in some barracks; asbestos; mold</td>
</tr>
<tr>
<td></td>
<td>Fort Knox, Ky.</td>
<td>C3</td>
<td>Roof and pipe leaks; inadequate ventilation; mold; asbestos tiles deteriorating; inoperable windows; clogged drains</td>
</tr>
<tr>
<td></td>
<td>Fort Leonard Wood, Mo.</td>
<td>C4</td>
<td>Inadequate heat and air conditioning; poor ventilation; mold; inadequate electrical systems; inadequate number of showers/bath fixtures</td>
</tr>
<tr>
<td></td>
<td>Fort Sill, Okla.</td>
<td>C3</td>
<td>Inadequate air conditioning; poor bath ventilation; roof leaks; shower leaks; clogged sinks and toilets</td>
</tr>
<tr>
<td>Navy</td>
<td>Great Lakes, Ill.</td>
<td>C4</td>
<td>No air conditioning; poor heating control; poor bath ventilation; exterior structure deterioration; asbestos; lead paint; water leaks; inadequate water pressure</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>Parris Island, S.C.</td>
<td>C2</td>
<td>Inadequate air conditioning; mold; poor ventilation in bath areas; roof leaks; no sprinkler systems; broken bath fixtures</td>
</tr>
<tr>
<td></td>
<td>San Diego, Calif.</td>
<td>C3</td>
<td>Excessive noise from airport; some clogged drains</td>
</tr>
<tr>
<td></td>
<td>Camp Pendleton, Calif.</td>
<td>C3</td>
<td>Plumbing deficiencies; roof leaks</td>
</tr>
<tr>
<td>Air Force</td>
<td>Lackland Air Force Base, Tex.</td>
<td>C3</td>
<td>Soil expansion under buildings causing floor deterioration; corrosion of underground pipes; some mildew</td>
</tr>
</tbody>
</table>

*The C-rating represents a composite rating for all recruit barracks at each location. The condition of individual barracks may vary.*

Source: DOD and GAO analysis of DOD data.
With the exception of Parris Island, all locations reported either C-3 or C-4 ratings for their barracks. These ratings are relatively consistent with the ratings of other facilities within the DOD inventory. Recent defense data\(^5\) show that nearly 70 percent of all DOD facilities are rated C-3 or C-4. Further, as shown in appendix 2, the C-ratings for recruit training barracks are not materially different from the ratings of other facilities at the training locations we visited.

The C-ratings depicted in table 2 show the overall condition of the recruit barracks at a specific location, but the condition of any one building within a service and at a specific location could differ from the overall rating. The Army, with the greatest number of barracks, had the most problems. For the most part, the Army’s barracks were in overall poor condition across its training locations, but some, such as a recently renovated barracks at Fort Jackson and a newly constructed reception barracks at Fort Leonard Wood, were in better condition. Similarly, the Navy barracks, with the exception of a newly constructed reception barracks in 2001, were in a similar degraded condition because the Navy, having decided to replace all of its barracks, had limited its maintenance expenditures on these facilities in recent years. Of the Marine Corps locations, Parris Island had many barracks in poor condition, the exception being a recently constructed female barracks. The barracks at San Diego and Camp Pendleton were generally in much better shape. The Air Force’s barracks, particularly five of eight barracks that had recently been renovated, were in generally better condition than the barracks at most locations we visited.

Our visits to the basic training locations confirmed that most of the barracks had significant or major deficiencies, but we found some apparent inconsistencies in the application of C-ratings to describe the condition of the barracks. For example, as a group, the barracks at the Marine Corps Recruit Depot, Parris Island, were the highest rated—C2—among all the services’ training barracks. The various conditions we observed, however, suggested that they were among the barracks with the worst physical condition we had seen. Marine Corps officials acknowledged that, although they had completed a recent inspection of the barracks and had identified significant deficiencies, the updated data had not yet been entered into the ratings database. As a result, the rating was based on outdated data. On the other hand, the barracks at the Marine Corps Recruit

Depot, San Diego, were rated C-3, primarily due to noise from the San Diego airport that is next to the depot. Otherwise, our observations indicated that these barracks appeared to be in much better physical condition than those at Parris Island because they were renovating the San Diego barracks. After we completed our work, the Marine Corps revised its Parris Island and San Diego barracks’ ratings to C-4 and C-2, respectively, in its fiscal year 2002 report. The Air Force barracks were rated C-3, but we observed them to be among those barracks in better physical condition and in significantly better condition than the Army barracks that were rated C-3. And the Navy’s C-4 rating for its barracks was borne out by our visits. Similar to the Marine Corps Parris Island and the Army barracks, we found in general that the Navy barracks were in the worst physical condition.

In our discussions with service officials, we learned that the services use different methodologies to arrive at their C-ratings. For example, except the Army, the services use engineers to periodically inspect facility condition and identify needed repair projects. The Army uses building occupants to perform its inspections using a standard inspection form. Further, except the Army, the services consider the magnitude of needed repair costs for the barracks at the training locations in determining the facilities’ C-ratings. While these methodological differences may produce inconsistencies in C-ratings across the services, we did not specifically review the impact the differences may have on the ratings in this assignment. Instead, we are continuing to examine consistency issues regarding service-wide facility-condition ratings as part of our broader ongoing work on the physical condition and maintenance of all DOD facilities.

Most Barracks Have Several Typical Deficiencies

Our visits to all 10 locations where the military services conduct basic training confirm that most barracks have many of the same types of deficiencies that are shown in table 2. The most prevalent problems included a lack of or inadequate heating and air conditioning, inadequate ventilation (particularly in bathing areas), and plumbing-related deficiencies.

Inadequate heating or air conditioning in recruit barracks was a common problem at most locations. The Navy’s barracks at Great Lakes, for example, had no air conditioning, and base officials told us that it becomes very uncomfortable at times, especially in the summer months when the barracks are filled with recruits who have just returned from training exercises. During our visit, the temperature inside several of the barracks
we toured ran above 90 degrees with little or no air circulation. Base
officials also told us that the excessive heat created an uncomfortable
sleeping situation for the recruits. At the Marine Corps Recruit Depot at
Parris Island, several barracks that had been previously retrofitted to
include air conditioning had continual cooling problems because of
improperly sized equipment and ductwork. Further, we were told by base
officials that a high incidence of respiratory problems affected recruits
housed in these barracks (as well as in some barracks at other locations),
and the officials suspected mold spores and other contaminants arising
from the filtration system and ductwork as a primary cause. At the time of
our visit, the Marine Corps was investigating the health implications arising
from the air-conditioning system. And, during our tour of a barracks at Fort
Sill, Army personnel told us that the air conditioning had been inoperable
in one wing of the building for about 2 years.

Inadequate ventilation in recruit barracks, especially in central bathing
areas that were often subject to overcrowding and heavy use, was another
common problem across the services. Many of the central baths in the
barracks either had no exhaust fans or had undersized units that were
inadequate to expel moisture arising from shower use. As a result, mildew
formation and damage to the bath ceilings, as shown in figure 2, were
common. In barracks that had undergone renovation, however, additional
ventilation had been installed to alleviate the problems.
Plumbing deficiencies were also a common problem in the barracks across the services. Base officials told us that plumbing problems—including broken and clogged toilets and urinals, inoperable showers, pipe leaks, and slow or clogged drainpipes and sinks—were recurring problems that often awaited repairs due to maintenance-funding shortages. As shown in figures 3 and 4, we observed leaking drainpipes and broken or clogged bath fixtures in many of the barracks we visited. In regard to the broken fixtures, training officials told us that the problems had exacerbated an undesirable situation that already existed in the barracks—a shortage of fixtures and showers to adequately accommodate the demands of recruit training. These officials told us that because of the inadequate bath facilities for the high number of recruits, they often had to perform “workarounds”—such as establishing time limits for recruits taking showers—in order to minimize, but not eliminate, adverse effects on training time.
Figure 3: Leaking Drain Pipe at Ft. Knox Recruit Barracks

![Leaking Drain Pipe at Ft. Knox Recruit Barracks](image)

Source: GAO photograph.

Figure 4: Inoperable Bath Fixtures at Parris Island Recruit Barracks

![Inoperable Bath Fixtures at Parris Island Recruit Barracks](image)

Source: GAO photograph.
Base officials at most of the locations we visited attributed the deteriorated condition of the recruit barracks to recurring inadequate maintenance, which they ascribed to funding shortages that had occurred over the last 10 years. Without adequate maintenance, facilities tend to deteriorate more rapidly. In many cases that officials cited, they were focusing on emergency repairs and not performing routine preventative maintenance. Our analysis of cost data generated by DOD's facility sustainment model showed, for example, that Fort Knox required about $38 million in fiscal year 2002 to sustain its base facilities. However, base officials told us they received about $10 million, or 26 percent, of the required funding. Officials at other Army basic training sites also told us that they receive less funding, typically 30 to 40 percent, than what they considered was required to sustain their facilities. Army officials told us that, over time, the maintenance funding shortfalls at their training bases have been caused primarily by the migration of funding from maintenance accounts to support other priorities, such as the training mission.

Some Improvements Have Been Made

While most barracks across the services had significant deficiencies, others were in better condition, primarily because they had recently been constructed or renovated. Those barracks that we observed to be in better condition were scattered throughout the Army, Air Force, and Marine Corps locations. Even at those locations where some barracks were in very poor condition, we occasionally observed other barracks in much better condition. For example, at Parris Island, the Marine Corps recently completed construction of a new female recruit barracks. At Fort Jackson, the Army repaired windows, plumbing, and roofs in several “starship” barracks and similar repairs were underway in two other starships. Figures 5 and 6 show renovated bath areas at Lackland Air Force Base in Texas and the Marine Corps Recruit Depot at San Diego.

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6The facility sustainment model, using standard facility-specific cost factors, generates an annual funding requirement to sustain a particular type of facility. We did not validate this model.
Figure 5: Renovated Recruit Barracks’ Bath at Lackland Air Force Base

Source: Air Force photograph.

Figure 6: Renovated Showers at Marine Corps Recruit Depot, San Diego

Source: GAO photograph.
Military Services Have Different Approaches for Barracks’ Recapitalization

The services’ approaches to recapitalize their recruit barracks vary and are influenced by their overall priorities to improve all facilities. The Marine Corps and Air Force are focusing primarily on renovating existing facilities while the Navy plans to construct all new recruit barracks. The Army also expects to renovate and construct recruit barracks, but the majority of the funding needed to support these efforts is not expected to be programmed and available until after 2008 because of the priority placed on improving bachelor enlisted quarters. Table 3 summarizes the services’ recapitalization plans.

Table 3: Recapitalization Plans for Recruit Barracks

<table>
<thead>
<tr>
<th>Military Service</th>
<th>Estimated funding</th>
<th>Synopsis of plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy</td>
<td>$570</td>
<td>Construct 16 new barracks by 2009; 1 reception barracks is completed, and 2 other barracks are under construction</td>
</tr>
<tr>
<td>Army</td>
<td>1,733</td>
<td>Renovate existing barracks at Forts Benning and Sill and construct new barracks at Forts Jackson and Leonard Wood through 2007; most funding planned for the long-term (2009-2025)</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>56</td>
<td>Renovate existing barracks and construct 2 new barracks</td>
</tr>
<tr>
<td>Air Force</td>
<td>89</td>
<td>Renovate existing barracks and convert additional facility for recruit use by 2006</td>
</tr>
</tbody>
</table>

Source: GAO analysis of DOD data.

The Navy has placed a high priority on replacing its 16 recruit barracks by fiscal year 2009 at an estimated cost of $570 million using military construction funds. The Navy recently completed a new recruit reception barracks, and the Congress has approved funding for four additional barracks. Two barracks are under construction with occupancy expected later this year (see fig. 7), and the contract for 2 more barracks was awarded in May 2002. The Navy has requested funds for another 2 barracks in its fiscal year 2003 military construction budget submission and plans to request funds for the remaining 9 barracks in fiscal years 2004 through 2007. The Navy expects construction on the last barracks to be completed by 2009. Navy officials told us that other high-priority Navy-wide efforts

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7The Navy estimates spending an additional $149 million at the Naval Training Center, Great Lakes, for other facilities, such as a physical fitness center, that support the basic training mission.
(e.g., providing quality bachelor enlisted quarters and housing for sailors while ships are in homeport) could affect the Navy’s recapitalization efforts for recruit barracks.

Figure 7: Recruit Barracks under Construction at Great Lakes Naval Training Center

Source: GAO photograph.

The Army projects an estimated $1.7 billion will be needed to renovate or replace much of its recruit training barracks, but most of the work is long-term over the next 20 years, primarily because renovating and replacing bachelor enlisted quarters has been a higher priority in the near-term. Through fiscal year 2003, the Army expects to spend about $154 million for 2 new barracks—1 each at Fort Jackson and Fort Leonard Wood. Army officials stated that barracks at these locations were given priority over other locations because of capacity shortfalls at these installations. After fiscal year 2003, the Army estimates spending nearly $1.6 billion in military construction funds to recapitalize other recruit barracks—about $359 million to renovate existing barracks at several locations and about $1.2 billion to build new barracks at all locations, except Fort Sill. Only Forts Jackson and Leonard Wood are expected to receive funding for new barracks through fiscal year 2007. Further, the Army does not expect to begin much additional work until after 2008, when it expects to complete the renovation or replacement of bachelor enlisted quarters. As a result,
Army officials stated that the remaining required funding for recruit barracks would most likely be requested between 2009 and 2025.

The Marine Corps has a more limited recruit barracks recapitalization program, primarily because it has placed a high priority on renovating or replacing bachelor enlisted quarters in the near-term. The three recruit training installations plan to renovate their existing recruit barracks and construct two additional barracks at Parris Island and San Diego. The Marine Corps expects to spend about $40 million in operation and maintenance funds to renovate existing barracks at its training locations by fiscal year 2004. The renovations include replacing the bath and shower facilities, replacing hot water and heating and air conditioning systems, and upgrading the electrical systems. The Marine Corps also expects to spend at least $16 million in military construction for the new barracks by fiscal year 2009.

The Air Force has placed a high priority on renovating, rather than replacing its recruit barracks in the near-term. It expects to spend about $89 million—primarily operation and maintenance funds—to renovate its existing barracks and convert another facility for use as a recruit barracks. As of April 2002, the Air Force had renovated 5 of its existing 8 barracks and expected to complete the remaining renovations by 2006. The renovations include upgrading heating, ventilation, and air-conditioning systems as well as installing new windows and improving the central baths. Due to expected increases in the number of recruits, the Air Force has also identified an additional building to be renovated for use as a recruit barracks. The Air Force intends to complete this renovation in fiscal year 2003. Officials at Lackland Air Force Base stated they are currently drafting a new base master plan, which identifies the need to build new recruit barracks starting around 2012.

Agency Comments

We requested comments on a draft of this report from the Secretary of Defense. An official from the Office of the Deputy Under Secretary of Defense (Installations & Environment) orally concurred with the information in our report and provided technical comments that we incorporated as appropriate.
Scope and Methodology

We performed our work at the Office of the Secretary of Defense and the headquarters of each military service. We also visited each military installation that conducts recruit basic training—Fort Jackson, South Carolina; Fort Benning, Georgia; Fort Knox, Kentucky; Fort Leonard Wood, Missouri; Fort Sill Oklahoma; Great Lakes Naval Training Center, Illinois; Lackland Air Force Base, Texas; Marine Corps Recruit Depot, Parris Island, South Carolina; Marine Corps Recruit Depot, San Diego, California; and Camp Pendleton, California. In discussing recruit barracks, we included barracks used to house recruits attending the Army’s One Station Unit Training. This training, which is conducted at select basic training locations for recruits interested in specific military occupational specialties, combines basic training with advanced individual training into one continuous course.

To assess the physical condition of recruit barracks, we reviewed the fiscal year 2000 and 2001 installation readiness reports and supporting documentation for the ten installations that conduct basic training. We also toured several barracks at each installation and photographed conditions of the barracks. Finally, we interviewed officials at the services’ headquarters and each installation regarding the process used to inspect facilities, collect information to support the condition rating, and the underlying reasons for the current condition of the facilities.

To determine the services’ plans to sustain and recapitalize recruit barracks, we reviewed the services’ plans for renovating its existing barracks and constructing new barracks. In addition, we interviewed officials in the headquarters of each service responsible for managing installations and programming operation and maintenance and military construction funds.

We conducted our work from March through May 2002 in accordance with generally accepted government auditing standards.

We are sending copies of this report to the Secretaries of Defense, the Army, the Navy, and the Air Force; the Commandant of the Marine Corps; and the Director, Office and Management and Budget. In addition, the report will available at no charge on GAO's Web site at www.gao.gov and to others upon request.
Please contact me on (202) 512-8412 if you or your staff have any questions regarding this report. Key contributors to this report were Michael Kennedy, James Reifsnyder, Richard Meeks, Laura Talbott, and R.K. Wild.

Barry Holman, Director
Defense Capabilities and Management
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Ranking Member
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United States Senate

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Ranking Member
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House of Representatives

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Chairman
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Ranking Member
Subcommittee on Defense
Committee on Appropriations
House of Representatives
The military services conduct recruit basic training at ten installations in the United States. The Army has the most locations—five, with Fort Jackson, South Carolina, training the most Army recruits. The Marine Corps conducts its training at two primary locations—Parris Island, South Carolina on the east coast and San Diego in the west. Further, about 4 weeks (consisting of weapons qualification and field training exercises) of the Marine Corps’ 12-week basic training course at San Diego is conducted at Camp Pendleton because of training space limitations at its San Diego location. The Navy and Air Force conduct their basic training at one location each—Great Lakes, Illinois, and Lackland Air Force Base in San Antonio, Texas, respectively.
Appendix II

C-Rating Comparisons at Basic Training Locations

Under DOD's installation readiness reporting system, military installation facilities are grouped into nine separate facility classes. Recruit barracks are part of the “community and housing” facility class. Figure 9 depicts the fiscal year 2001 C-ratings for each of the nine facility classes, as well as for the recruit barracks component of the “community and housing” facility class, at each basic training location.

Figure 9: Basic Training Installation C-Ratings by Facility Class for Fiscal Year 2001

<table>
<thead>
<tr>
<th>Service</th>
<th>Location</th>
<th>Recruit Barracks</th>
<th>Operations and Training</th>
<th>Maintenance and Production</th>
<th>Research and Development</th>
<th>Test</th>
<th>Supply</th>
<th>Medical</th>
<th>Administrative</th>
<th>Community and Housing</th>
<th>Utilities and Grounds Improvement</th>
<th>Mobility</th>
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<td>C3</td>
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<td>C3</td>
<td>C2</td>
<td>C1</td>
<td>C4</td>
<td>C3</td>
<td>C2</td>
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<td>C3</td>
<td>C3</td>
<td>C1</td>
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<td>Fort Knox, Ky.</td>
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<td>C2</td>
<td>C3</td>
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<tr>
<td></td>
<td>Fort Leonard Wood, Mo.</td>
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<td>C3</td>
<td>C2</td>
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<td>C4</td>
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<td>C3</td>
<td>C1</td>
<td>C4</td>
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<td>C2</td>
<td>C3</td>
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<td>N/A</td>
</tr>
<tr>
<td>Air Force</td>
<td>Lackland Air Force Base, Tex.</td>
<td>C3</td>
<td>C3</td>
<td>C3</td>
<td>C1</td>
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<td>C1</td>
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</tbody>
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Source: DOD data.
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